

Remarks/Arguments

Claims 14-20 remain pending in the Application.

Claims 14-20 were elected for prosecution as the result of a restriction/election requirement. Claims 1-13 were withdrawn without traverse. Claims 14-17 and 20 have been canceled.

The Examiner has objected to the Abstract as it uses the legal phraseology "comprising". The abstract has been amended as recited in the **Amendments to the Specification** portion of this Amendment.

Claim 18 has been amended to clarify that in the present invention one molds a plastic substrate on said polyurethane dispersion. Support can be found, e.g. at page 3, lines 20-22 where the polyurethane dispersion is said to prevent "strike-through" of the cloth layer by the plastic as it is being molded into a substrate behind the polyurethane backing layer. See also, page 8, lines 13-19.

Turning to the rejection, the Examiner has first rejected claims 14-18 and 20 as being anticipated by Gribble, et al. (United States Patent Application No. 2004/0109992).

As noted above, claims 14-17 and 20 have been canceled thereby rendering this rejection moot.

The present invention stands directed at a method of forming a trim cover by supplying a cloth and applying a polyurethane dispersion as a backing layer to said cloth, without the use of adhesives or flame lamination. A molded plastic substrate may be molded on to the polyurethane backing layer without the use of a barrier film.

The Examiner stated that Gribble, et al. (United States Patent Application No. 2004/0109992) is directed at a process for making a foam composite by frothing an aqueous polyurethane formulation on to a substrate.

However, with regards to claim 18, Gribble, et al. is silent as to molding a molded plastic substrate on said polyurethane dispersion without the use of a barrier film applied to said polyurethane back layer of said cloth. Gribble, et al. simply recites “a substrate” but defines such as the surface to which the frothed dispersion is directly applied. (See Abstract and paragraphs [0001] and [0008] of Gribble, et al.) Gribble, et al. do not teach or suggest backing said polyurethane dispersion with a **molded plastic substrate**. Gribble, et al. is therefore directed at applying a frothed polyurethane dispersion to a substrate wherein the substrate may be a textile.

Applicants’ invention provides a cloth or fabric cover, including a polyurethane dispersion backing layer, that may be injection molded behind (see dependent claim 19) where the polyurethane dispersion prevents “strike-through” of the cloth layer by the plastic as it is being molded into a substrate behind the polyurethane backing layer. See again page 3, lines 7-10 and page 4, lines 10-15 and claim 18.

This feature of the invention is further described in exemplary embodiment at page 8, lines 11-19 wherein “shoot behind” processes are described to form trim panels including a molded plastic substrate.

The Examiner comments that Gribble, et al. “teach applying a plastic film (plastic substrate) to a foam backed fabric without the need of a non-permeable layer (see paragraph

[0007] and [0011]”. These paragraphs of Gribble et al therefore require careful analysis when read in context of the entire disclosure.

Specifically, Gribble et al teaches that one may form a foam back textile “without the need for a flame lamination step or the need for an adhesive layer between the textile and the foam layer...”. See Abstract. On that note it should be clear that Gribble et al has apparently developed a particular foam composition with a particular dry density of 2.2-10 lbs/cft such that it would not, apparently, itself pass-through the fabric. In that sense, Gribble teaches that the solution to pass-through from the foam and into the fabric is in the foam formulation itself and that one may avoid flame lamination or an adhesive layer between the textile and the foam.

In paragraph [0007], which the Examiner cites, Gribble, et al., as in the Abstract, is therefore again simply emphasizing a process that “**avoids the need**” for flame lamination, adhesive or a non-permeable layer associated **with the substrate (fabric)**. In other words, Gribble is not teaching anything about the ability to avoid the use of film in that situation where one might include the additional step of molding a plastic substrate which then will engage with the foam and potentially strike-through the foam and through the textile layer.

In paragraph [0011], Gribble, et al. describes the “hot lamination of a thin film” as a means to “enhance the coefficient of friction at the surface” of the foam. In other words, applying a thin film to the backside of the foam. This would lead to a structure that would represent a build-up of cloth, foam dispersion and then film. This is different than claim 18 which recites cloth, dispersion and molded plastic substrate. Again, Gribble does not teach or suggest that cloth with dispersion would allow for molding behind a plastic substrate without the use of barrier film.

Turning to the 35 U.S.C. 103(a) rejection, the Examiner cites Gill, et al. (United States Patent No. 5,124,368) in view of JP 02-143842. The Examiner admits that “Gill, et al. (‘368) do not teach the use of a polyurethane backing as a polyurethane dispersion (pending claim 18). Thus, an element of the pending claims is completely missing from this principal reference of record.

Gill, et al. appears to be directed at a polyurethane formulation that may be “poured-in-place” behind an exterior layer, such as upholstery cloth, and which, on its own, is said not to strike through such exterior layer. In that regard, Gill et al points out that contrary to the conventional expectation that hydrophilic polyhydric compounds (utilized to form the polyurethane) would cause strike-through problems, it was found that such compounds had a “stabilizing effect.” See Abstract. Gill et al then goes on to emphasize features of the polyurethane formulation chemistry, such as the use of glycerin along with TDI (toluene diisocyanate).

That being the case, Gill et al was only concerned with providing a polyurethane formulation that itself would not result in strike through, but it was not disclosed or suggested that a cloth layer, containing polyurethane dispersion would itself be a candidate for molding behind with a molded plastic substrate without the need of a barrier layer. See claim 18.

Furthermore, it appears that the Examiner equated (in Gill et al) an injected foam to a molded plastic substrate (see item 6 on page 3 of the Office Action, dated May 23, 2005). For reasons noted above and below, these are not equivalent processes.

Turning to the secondary reference of JP 02-143842, this disclosure appears to be directed at applying a filled resin dispersion of polyurethane to a **surface sheet**. The reference is

silent as to molding a plastic molded substrate to a dispersion layer without the use of barrier film (claim 18).

Further, dependent claim 19 was rejected by the Examiner as being unpatentable over Gribble, et al. in view of Applicants' admitted prior art.

Applicants' admitted prior art may be found at page 1, lines 24-27 of the Application and describes a laminated cloth (with acrylic latex coated applied to the backside) shaped by vacuum or the injection of "liquid foam precursors". This "pour-in-place" process is well-known to those skilled in the art for forming a **soft foam** layer behind a trim cover, and should not be confused with the "injection molding" of claim 19. Injection molding as known to those skilled in the art is a relatively high pressure process that may form a higher density, generally structural layer, the higher pressure greatly increasing the risk of "strike-through." None of the cited references, nor the Applicants' admitted prior art, taken alone or in combination, teach or suggest **molding a plastic molded substrate to said polyurethane (dispersion) backing layer of said cloth**. Further, none of the cited references, nor the Applicants' admitted prior art taken alone or in combination teach or suggest that said plastic molded substrate is formed by **injection molding**.

In consideration of the amendments to the claims and the remarks hereinabove, Applicant respectfully submits that all claims currently pending in the application are believed to be in condition for examination. Allowance at an early date is respectfully solicited.

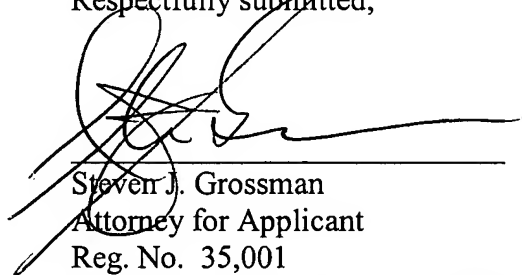
In the event the Examiner deems personal contact is necessary, please contact the undersigned attorney at (603) 668-6560.

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Amndt. dated August 23, 2005
Reply to Office Action of May 23, 2005



In the event there are any fee deficiencies or additional fees are payable, please charge them (or credit any overpayment) to our Deposit Account No. 50-2121.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Steven J. Grossman". The signature is written over a horizontal line.

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I hereby certify that this correspondence is being deposited with the United States Postal Service First Class Main in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on August 23, 2005, at Manchester, New Hampshire.

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